

Article

An Overview on Chemical Hazards and Detection Methods in Egg

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Abstract: Egg has been an important nutritional deity food for human since ancient times. It is one of the highly nutritious foods among the human food stuff cycle and can be an effective delivery system for health – regulating nutrients, vitamins, proteins, fat etc. Despite the nutritional content of eggs, some potential health risks are associated with their consumption, including exposure to environmental contaminants and in some instances individual allergies. Eggs might contain elevated levels of heavy metals originated mainly from food and water feed, which are mainly influenced by the surrounding environment. Antibiotics are used by the veterinarians and poultry industry to enhance growth rates, health of the birds and etc. Although antibiotics have considerable benefits in most cases, the illegal use of these drugs has led to the accumulation of toxic antibiotic residues in edible poultry products destined for human consumption. Aflatoxins are toxic and carcinogenic secondary metabolites produced by some strains of *Aspergillus flavus*, *Aspergillus parasitiscus* during their growth on feed. Aflatoxin-contaminated feed may affect the growth and health of poultry and the possible transmission of such toxic residues to edible eggs resulting in potential hazards to human health. Organochlorine pesticides (OCPs) have been used in the public health sector for disease vector control and in agriculture to control crop pests for the past several decades in Jordan. They are characterized by low water solubility and high lipid solubility, leading to their bioaccumulation in fatty tissues. Therefore, they can accumulate in human body fats and